

(FILE 'HOME' ENTERED AT 16:52:32 ON 04 APR 2003)

FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, MEDICONF' ENTERED  
AT 16:52:47 ON 04 APR 2003

L1 239 S (I-SCE? OR I-CSM? OR I-PAN? OR I-CEU? OR I-PPO? OR I-CRE? OR  
L2 118 DUP REM L1 (121 DUPLICATES REMOVED)  
L3 9 S L2 AND CULTUR?  
L4 9 SORT L3 PY  
L5 47 S (I-SCE? OR I-CSM? OR I-PAN? OR I-CEU? OR I-PPO? OR I-CRE? OR  
L6 22 DUP REM L5 (25 DUPLICATES REMOVED)  
L7 22 SORT L6 PY

=> d an ti so au ab pi 17 12 21 9 16

L7 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2003 ACS

AN 1998:545391 CAPLUS

DN 129:172448

TI Cloning and expression of gene for restriction endonuclease I-SceI of  
Saccharomyces cerevisiae and use of I-SceI

SO U.S., 79 pp., Cont.-in-part of U. S. 5,474,896.

CODEN: USXXAM

IN Dujon, Bernard; Choulika, Andre; Perrin, Arnaud; Nicolas, Jean-francois

AB A mitochondrial gene encoding restriction endonuclease I-  
**SceI** of Saccharomyces cerevisiae and a synthetic universal code  
encoding **I-SceI** for the expression in Escherichia coli  
and yeasts are provided. Applications of **I-SceI** for  
genetically mapping yeast chromosomes by the nested chromosomal  
fragmentation strategy, inducing double stranded DNA break, and in vivo  
site-directed insertion of genes and homologous recombination in  
eukaryotes are also described. It may also be used for prep.  
**transgenic** animal models of human diseases and genetic disorders.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 5792632	A	19980811	US 1994-336241	19941107
US 5474896	A	19951212	US 1992-971160	19921105
US 5866361	A	19990202	US 1995-465273	19950605
CA 2203569	AA	19960517	CA 1995-2203569	19951106
WO 9614408	A2	19960517	WO 1995-EP4351	19951106
WO 9614408	A3	19960829		

W: CA, JP

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 791058	A1	19970827	EP 1995-938418	19951106
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

JP 10508478	T2	19980825	JP 1995-515058	19951106
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US 6395959	B1	20020528	US 1996-643732	19960506
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US 5948678	A	19990907	US 1998-119024	19980720
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L7 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2003 ACS

AN 2002:403935 CAPLUS

DN 136:396983

TI Nucleotide sequence encoding yeast restriction endonuclease I-SceI and  
uses in genetic mapping and site-directed gene recombination

SO U.S., 84 pp., Cont.-in-part of U.S. 5,792,632.

CODEN: USXXAM

IN Dujon, Bernard; Choulika, Andre; Perrin, Arnaud; Nicolas, Jean-Francois

AB The present invention relates to an isolated yeast DNA encoding the  
restriction endonuclease **I-SceI**, and use of **I**  
**-SceI** for mapping eukaryotic genomes and for in vivo site  
directed genetic recombination. Specifically, the invention relates to a  
vector comprising a plasmid, bacteriophage, or cosmid vector contg. the  
DNA sequence of the enzyme **I-SceI**. The invention also  
relates to E. coli, eukaryotic cells transformed with a vector of the  
invention, **transgenic** animal with the DNA sequence encoding  
**I-SceI**. The invention relates to a **transgenic**  
organism in which at least one restriction site for the enzyme **I**  
**-SceI** has been inserted in a chromosome of the organism. The  
invention further relates to methods for gene mapping in yeast chromosome,  
yeast artificial chromosome, and cosmids, and site-directed insertion of  
genes.

L Number	Hits	Search Text	DB	Time stamp
1	543	(group ADJ I ADJ Intron)or (intron ADJ encoded)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:12
8	178	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and transgenic	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:12
15	450	I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:18
22	55	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and transgenic	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:14
29	9	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and transgenic.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:14
36	9	DUJON NEAR BERNARD	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:17
43	39	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) WITH cell	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:28
57	44	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) WITH (eukaryotic mammalian cell)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:48
64	15	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) WITH mouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:48

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6395959	B1	20020528	US 1996-643732	19960506
	US 5474896	A	19951212	US 1992-971160	19921105
	US 5792632	A	19980811	US 1994-336241	19941107

L7 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2003 ACS  
AN 1996:428575 CAPLUS  
DN 125:107019  
TI Nucleotide sequence encoding yeast enzyme I-SceI and its use in inducing homologous recombination in eukaryotic cells and protein production in **transgenic** animals  
SO PCT Int. Appl., 122 pp.  
CODEN: PIXXD2  
IN Chouluka, Andre; Perrin, Arnaud; Dujon, Bernard; Nicolas, Jean-Francois  
AB Synthetic DNA encoding the enzyme I-SceI is provided. The DNA sequence can be incorporated in cloning and expression vectors, transformed cell lines and **transgenic** animals. The vectors are useful in gene mapping and site-directed insertion of genes. A synthetic gene encoding *Saccharomyces cerevisiae* I-SceI restriction endonuclease was expressed in *Escherichia coli* and yeast. The enzyme was used in genetic mapping of a yeast chromosome, of YAC's, and of cosmids. I-SceI efficiently induced double-stranded breaks in a chromosomal target in mammalian cells and the breaks were repaired using a donor mol. that shares homol. with the regions flanking the break.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9614408	A2	19960517	WO 1995-EP4351	19951106
	WO 9614408	A3	19960829		
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5792632	A	19980811	US 1994-336241	19941107
	EP 791058	A1	19970827	EP 1995-938418	19951106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10508478	T2	19980825	JP 1995-515058	19951106

L7 ANSWER 16 OF 22 MEDLINE  
AN 2002491377 IN-PROCESS  
TI I-SceI meganuclease mediates highly efficient transgenesis in fish.  
SO MECHANISMS OF DEVELOPMENT, (2002 Oct) 118 (1-2) 91-8.  
Journal code: 9101218. ISSN: 0925-4773.  
AU Thermes Violette; Grabher Clemens; Ristatore Filomena; Bourrat Franck; Chouluka Andre; Wittbrodt Jochen; Joly Jean-Stephane  
AB The widespread use of fish as model systems is still limited by the mosaic distribution of cells transiently expressing transgenes leading to a low frequency of **transgenic** fish. Here we present a strategy that overcomes this problem. Transgenes of interest were flanked by two I-SceI meganuclease recognition sites, and co-injected together with the I-SceI meganuclease enzyme into medaka embryos (*Oryzias latipes*) at the one-cell stage. First, the promoter dependent expression was strongly enhanced. Already in F0, 76% of the embryos exhibited uniform promoter dependent expression compared to 26% when injections were performed without meganuclease. Second, the transgenesis frequency was raised to 30.5%. Even more striking was the increase in the germline transmission rate. Whereas in standard protocols it does not exceed a few percent, the number of **transgenic** F1 offspring of an identified founder fish reached the optimum of 50% in most lines resulting from meganuclease co-injection. Southern blot analysis showed that the individual integration loci contain only one or few copies of the transgene in tandem. At a lower rate this method also leads to enhancer trapping effects, novel patterns that are likely due to the integration of the transgene in the vicinity of enhancer elements. Meganuclease co-injection thus provides a simple and highly efficient tool to improve transgenesis by microinjection.

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1	543	(group ADJ I ADJ Intron)or (intron ADJ encoded)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:12
8	178	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and transgenic	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:12
15	450	I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:13
22	55	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and transgenic	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:14
29	9	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and transgenic.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:14
36	9	DUJON NEAR BERNARD	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/04/04 16:17
-	11	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and (chromosome\$2 NEAR mammal\$10)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:53
-	17	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and I-sceI\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:58
-	90	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and (eukaryo\$5 animal\$2 mammal\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:14
-	380	I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:27
-	49	(I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and (eukaryo\$5 animal\$2 mammal\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/28 14:48
-	48	(I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and (homo\$5 recomb\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:40
-	5	(I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:34
-	2	wo NEAR "9614408"	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:38

-	87	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) and (homo\$5 recomb\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:40
-	9	DUJON-BERNARD	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:34
-	44	(I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) NEAR site	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:35
-	35	((I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) NEAR site) and chromosome	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:37
-	8	((I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) NEAR site) and (mammal\$5 NEAR chromosome)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:40
-	0	((I-SCE\$2 I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) NEAR site) SAME (mammal\$5 NEAR chromosome)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:40
-	6	(I-CSM\$2 I-pan\$2 I-ceu\$2 I-ppo\$2 I-cre\$2 I-tev\$2) SAME (eukaryo\$5 animal\$2 mammal\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/28 14:48